IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assistant Commissioner for Patents
BOX PATENT APPLICATION
Washington, D.C. 20231

TRANSMITTAL FOR A NEWLY EXECUTED ORIGINAL APPLICATION
UNDER 37 C.F.R. §1.53(b)

This is a request for filing a patent application under 37 C.F.R. §1.53(b) for:

Inventors: Ying XIE, Elaine CHIEN and Peter WILLIAMS

For: EFFICIENT IMPLEMENTATION OF AN AUCTION PROXY BID ENGINE

1.   This is a new [X] **Utility**   [ ] **Design**   [ ] **Plant** patent application.

2.   The papers enclosed to obtain a filing date are as follows:
    <u>22</u>   Pages of Application including
    <u>1</u>   Title Page
    <u>11</u>   Pages of Disclosure
    <u>5</u>   Pages of Claims
    <u>1</u>   Page of Abstract
    <u>4</u>   Sheets of drawings containing Figures 1-4
            [ ]   The enclosed drawing(s) are photograph(s), and there is also attached a
                    PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S).

3.   Combined Declaration and Power of Attorney
    [X]   Enclosed and is executed by all inventors.
    [ ]   Not Enclosed.
            This application is being filed under the provisions of 37 C.F.R. §1.53(f).
            Applicant(s) await notification from the Patent and Trademark Office of the time
            set for filing the Declaration and paying the filing fees.

4.   Language
    [X]   English
    [ ]   Non-English
            This application is being filed in accordance with 37 C.F.R. §1.52(d) and §608.01
            of the MPEP. Applicant(s) await notification from the Patent and Trademark
            Office of the time set for filing the verified English translation and the processing fee.

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5.   Assignment

[X]   An assignment of the invention to Sun Microsystems, Inc. and a PTO Form-1595, Recordation Form Cover Sheet, are enclosed.

[ ]   An assignment will be filed at a later date.

6.   Priority - foreign applications under 35 U.S.C. §119(a)-(d) or §365(b) or PCT international applications under 35 U.S.C. §365(a) designating at least one country other than the U.S.

[ ] Priority of the following foreign application(s) is claimed:

Country	Application No.	Filed

Certified copy: [ ] is attached. [ ] will follow.

7.   Priority based on provisional application(s) - 35 U.S.C. §119(e)

[ ] Priority of the following provisional application(s) is claimed:

Application No.	Filed

A.   Relate Back - 35 U.S.C. §119(e)

[ ]   Amend the specification by inserting before the first line the sentence: "This application claims priority of copending provisional application(s) No. _____ filed on _____."

8.   Small entity status

[ ]   A statement claiming small entity status under 37 C.F.R. §§1.9 and 1.27 is enclosed.

9.   Fee Calculation (37 C.F.R. § 1.16)

CLAIMS FOR FEE CALCULATION				
	Number Filed	Number Extra	at Rate of	Basic Fee Utility $710.00 Design $310.00
Total Claims (37 C.F.R. §1.16(c))	15 - 20 =	0	$ 18.00 each=	+$ 710.00
Independent Claims (37 C.F.R. §1.16(b))	4 - 3 =	1	$ 80.00 each=	+ $ 80.00
Multiple dependent claim(s), if any (37 C.F.R. §1.16(d))			$ 260.00	+
Assignment Fee				+$40.00
			SUB-TOTAL =	$ 830.00
			Reduction by 1/2 for filing by a small entity	-$
			TOTAL FILING FEE =	$ 830.00

10.   Fee Payment

[ ]   Not Enclosed. **NO FEE IS BEING PAID BY CHECK OR DEPOSIT ACCOUNT AT THIS TIME.**
This application is being filed under the provisions of 37 C.F.R. §1.53(f).
Applicant(s) await notification from the Patent and Trademark Office of the time
set for filing the Declaration and paying the filing fees.

[X]   Please charge Deposit Account 50-1349 in the amount of $830.00 for the filing of this
application. A duplicate copy of this paper is enclosed.

11.   [X]   **Except** for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby
authorized by this paper to charge any additional fees during the entire pendency
of this application including fees due under 37 C.F.R. §§1.16 and 1.17 which may
be required, including any required extension of time fees, or credit any
overpayment to Deposit Account 50-1349. This paragraph is intended to be a
CONSTRUCTIVE PETITION FOR EXTENSION OF TIME in accordance with
37 C.F.R. §1.136(a)(3).

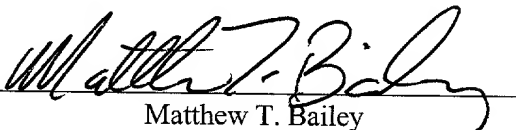3

12.   Additional papers enclosed:

[ ]   Change of Correspondence Address
[ ]   Preliminary Amendment
[ ]   Information Disclosure Statement
[ ]   Form PTO- 1449, __ documents as listed
[ ]   Declaration of Biological Deposit
[ ]   Submission of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence.

Please accord this application an application number and filing date.

Respectfully submitted,

MORGAN, LEWIS & BOCKIUS LLP

Dated: 15 November 2000   By:_____
                                                              Matthew T. Bailey
HOGAN & HARTSON LLP   Reg. No. 33,829
555 13th Street, N.W.
Washington, D.C. 20004
(202) 367-5600
Customer No. 24,633

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UNITED STATES PATENT APPLICATION

OF

Ying Xie, Elaine Chien and Peter Williams

EFFICIENT IMPLEMENTATION OF AN AUCTION PROXY BID ENGINE

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BACKGROUND OF THE INVENTION

1. <u>Field of the Invention</u>

5   The invention relates to on-line auction management. More specifically, the invention provides a system and method for efficiently determining the winning bidder and winning price for goods offered for sale in an on-line auction environment.

10   2.   <u>Discussion of the Related Art</u>

     Traditional auctions generally consist of a physical gathering that requires the presence of all bidders. The goods being offered for sale must generally be physically present at the auction location for inspection by potential bidders and pick-up by the buyers. An auctioneer solicits bids from the floor for a given item or

15 set of items, however, once the highest bid is accepted, the sale is closed and the next set of goods is brought to the floor. Thus, determining the winner of a conventional auction does not require significant effort because the winner is simply the person to bid the highest amount, i.e., typically the last bid.

     The emergence of on-line auctions has significantly expanded the scope of

20 auction formats available, the number of bidders that an auction can support, as well as the number of goods that may be auctioned off during an auction session.

     One type of auction format supported on-line is the English auction, which generally relies upon the submission of ascending bids with the highest bidder winning the auction. Other types of actions supported on-line include reverse

25 auctions and sealed auctions.

There are also several different techniques for bidding in an auction. Typically, the bidding simply ascends to a final sale price. Alternatively, in a reverse auction format, the bidding begins with a ceiling price and bidder's proceed from that price. Proxy bids are another variant on bidding. A proxy bid is a bid that doesn't have a bid price, instead the proxy bid is an indicator of the upper limit the bidder is willing to offer. Thus, as the bids ascend from a base price, a bidder submitting a proxy bid will win the auction if no one has bid higher than his or her proxy bid.

In the on-line auction environment, the auction engine is tasked with determining the winner. In a proxy bid format auction, the auction engine determines the winning price as the lowest price that would allow the bidder to win the auction, but not higher than the limit price. For example, in a one-item auction with a bid increment of $1, if a bidder has a proxy bid with a limit price of $50, and someone else has a bid price of $30, the auction engine should bid $31 for the proxy bid, so that the highest bidder (the person bidding $50) wins the auction without paying any more than needed to win the auction.

SUMMARY OF THE INVENTION

The proxy bid format described above can be expanded to include many bidders bidding for multiple quantities of goods. This significantly complicates the operation of conventional auction engines because these engines determine the winners by having each bid compete with every other bid one increment at a time.

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This approach requires significant computing resources on the part of the auction engine when there are many bidders and/or when the bidding increments are small.

The invention solves the problems associated with proxy bids in the on-line environment by providing an efficient auction engine. The auction engine according to the invention receives multiple proxy bids and determines the winner or winners, as well as the winning price. The auction engine according to the invention first sorts the proxy bids to determine the order of the bids, from the highest to lowest proxy bid. Then, depending on the proxy bid and the quantity of goods desired by each of the bidders, the auction engine according to the invention determines the winner or winners of the auction, along with the winning sale price.

To achieve these and other advantages and in accordance with the purpose of the invention, as embodied and broadly described herein, the invention provides a system that receives at least one proxy bid by at least one proxy bidder, sorts the received proxy bids in descending order; determines the winner or winners of the auction and generates the winning price to be paid by the winning bidder or bidders.

These and other features and advantages of this invention are described and are apparent from the following detailed description of the preferred embodiments.

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BRIEF DESCRIPTION OF THE DRAWINGS

The preferred embodiments of the invention will be described in detail, with reference to the following figures wherein:

Fig. 1 shows the process for determining the winner or winners of an on-line

5   proxy bid auction according to an embodiment of the invention;

Fig. 2 shows the process of Fig. 1 in greater detail;

Fig. 3 shows another embodiment of the process according to the invention; and

Fig. 4 shows an exemplary block diagram of the system according to an

10 embodiment of the invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Figure 1 shows the process for determining the winner or winners and winning price in an on-line auction that accepts proxy bids according to an embodiment of the invention. In Figure 1, the process begins with step S102 and

15 then moves to step S104. In step S104, the system receives the proxy bids. The bids may be received through a variety of sources as will be described in greater detail below. The process then moves to step S108. In step S108, the system sorts the proxy bids in descending order from the highest bid to the lowest. The process then moves to step S112.

20 In step S112, the system determines the winner or winners of the auction. As will be described in greater detail below, winners are determined based upon the highest proxy bid received, as well as the quantity of goods requested. For example,

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there can be more than one winner if the winning bidder does not want the entire

quantity of goods offered for sale. In that case, subsequent bidders may also win

the auction. As an example, if there are three highest bidders B1, B2 and B3, and

each bidder wanted 2, 3 and 2 items, respectively, and if there are a total of 5 goods

5   available, B1 and B2 are considered winning bidders because each receives their

desired quantity of goods.

In step S116, the system determines the winning price. In other words, the

system determines the price for which the goods will be sold. The invention

contemplates several techniques for determining the winning price. However, in

10   general, the winning price will be the highest losing bid plus an increment. In other

words, if the highest losing bid is $20, the system will generate a winning bid that is

higher than $20, for example, $21. This bid will be the winning bid price that all of

the winners will pay, regardless of their individual bid.

Fig. 2 shows the process shown in Figure 1 in greater detail. In step S205,

15   the system receives the bids. The process then moves to step S210. In step S210,

the system sorts all of the bids based upon the proxy bid's limit price. In other

words, the bids are sorted from the highest bid to the lowest. The process then goes

to step S215. In step S215, the system determines the quantity of goods available

for sale. The process then moves to step S220.

20   In step S220, the system designates the highest proxy bid as the "active bid."

The process then moves to step S225. In step S225, the system allocates to the

"active bid", or the highest bidder, the number of goods requested by the highest

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bidder. Thus, the highest bidder is allocated the exact number of goods that he or she wants as long as that many goods are available. The process then goes to step S230.

In step S230, the system determines whether any goods remain for sale after the highest bidder has been allocated the amount of goods that he or she has sought. If there are no additional goods, the process moves to step S240. Otherwise, the process moves to step S235. In step S235, the system advances the "active bid" designation to the next highest bidder. In other words, the next highest bidder is designated as the "active bid" after goods have been allocated to the previous "active bid." The process then goes to step S225 where goods are allocated to the "active bid." The process then goes to step S230 where the system determines whether there are any items remaining. If there are items remaining, the process returns to step S235. Otherwise, the process goes to step S240. Therefore, the system in effect establishes a loop whereby goods are allocated to bidders in order of descending bids until all of the goods have been allocated.

In step S240, the system determines the sale price. In the embodiment shown in Figure 2, the price is assigned by determining the highest price offered paid by a losing bidder and adding an increment to this value. Thus, if the highest losing bid has a proxy limit of $5050, the sale price will be $50 plus an increment. The increment can be preset by the system and may be, for example, one cent, one dollar, etc.

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Figure 3 illustrates the process according to another embodiment of the invention. In this embodiment, the system accounts for the situation where there are not enough goods to satisfy the quantity of goods requested by each of the auction winners.

In Figure 3, the process begins with step S302 and moves to step S304. In step S304, the system receives proxy bids from at least one bidder. The process then moves to step S306. In step S306, the system sorts the bids in order of descending proxy bids. The process then moves to step S308.

In step S308, the system determines the quantity of goods that are available for sale. The process then moves to step S310. In step S310, the system designates the highest proxy bid as the "active bid." The process then goes to step S312. In step S312, the system allocates goods to the "active bid." In other words, if the highest bidder, designated as the "active bid" wants 4 items, the system allocates 4 items to the buyer designated as the "active bid." The process then goes to step S314.

In step S314, the system determines whether there are any goods remaining. If there are no additional goods remaining, the process goes to step S318. Otherwise, the process goes to step S316. In step S316, the system advances the "active bid" to the next highest bid. In other words, if the highest bid was $50 and that bid was allocated goods in step S312, the next highest bid is designated as the "active bid" in step S316. The process then moves to step S312 where goods are allocated to the newly designated "active bid." The process then moves to step S314

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where the system determines whether there any goods remaining for sale. If there are additional goods for sale, the process returns to step S316 and this loop continues until all of the items have been allocated to winning bidders. When all of the goods have been allocated, the process moves to step S318.

5   In step S318, the system determines whether the last "active bid" i.e., or last winner, receives the number of goods that he or she requested. If the last winner does receive the number of goods that he or she requested, the last winner is considered satisfied and the process moves to step S320. Otherwise, the process moves to step S322.

10   In step S320, the system determines the winning price. The winning price is assigned by determining the highest price offered by a losing bidder and adding an increment to this value. Thus, if the highest losing bid is $50, the sale price will be $50 plus an increment. The increment can be preset by the system and may be, for example, one cent, one dollar, etc. Once the system determines the winning price, 15   the process moves to step S335 and ends.

In step S322, the system must account for the fact that one of the winners is not satisfied, that is, there are not enough goods to meet the requests of all of the winning bidders. Thus, in step S322, the system first assigns a winning price. For the last winner, the winning price is his or her proxy limit price, doe the other 20   winners, the winning price is the highest losing proxy bid plus an increment. The process then moves to step S324. In step S324, the system determines whether the last winner, i.e., the winning bidder that bid the lowest amount in comparison to

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the other winning bidders, accepts the partial sale. In other words, if the lowest

winning bidder requested 10 items but only 5 items are available, the system

determines whether the lowest winning bidder will accept the 5 items (i.e., a partial

sale). If the lowest winning bidder does not accept the partial sale, the process

5   moves to step S326, otherwise the process moves to step S330.

In step S330, because the last winning bidder is willing to accept fewer goods

than he or she originally sought, the system allocates the remaining goods to the

last winning bidder. The sale price was the price determined in step S322, so the

process then goes to step S335 and ends.

10   In step S326, the system allocates the remaining goods to the first losing

bidder, i.e., the bidder who bid the highest losing bid, and who is willing to accept

the quantity of goods that are available. The process then moves to step S328. In

step S328, the system assigns a price for goods accepted by the highest bidding

losing bidder. The sale price will be the exact price bid by the highest bidding losing

15   bidder. The process then goes to step S335 and ends.

Figure 4 shows an exemplary block diagram of a system according to one

embodiment of the invention for carrying out the process described above. Figure 4,

shows an auction engine 410 coupled across a network connection 480 to network

devices 420, 430 and 440. The network connection may be known networks,

20   including a local area network or the Internet. The auction engine houses a sorting

engine 412, a winning bidder engine 414 and a winning price engine 416.

In operation, the auction engine is capable of receiving input from the network devices 420, 430 and 440. The network devices may include any number of network communications devices, including workstation having a monitor and key board or an Internet appliance. The network devices 420, 430 and 440 can be used

5   to communicate a proxy bids from a plurality of bidders. The bids are transmitted over the communications network and are received by the auction engine 410.

The sorting engine 412 sorts the bids in descending order, i.e., from the highest proxy bid to the lowest. The winning bidder engine 414 then determines the winner or winners of the proxy bid auction. As was described earlier,

10 determining the winner or winners of the proxy bid auction is a function of the quantity of goods available. If there are more goods available for sale than the highest bidder is seeking, then the second highest bidder is also deemed a winner because there are goods available to satisfy the second highest bidder's request.

The winning price engine 416 then determines the winning price, i.e., the

15 price at which the goods will be sold to the winning bidder or bidders. The process for determining the winning price was discussed earlier in connection with embodiments of the invention. In general, if all of the winning bidders receive the quantity of goods that they were seeking, then the sale price is the value of the highest losing bid price, plus an increment over that price, i.e., one dollar, one cent

20 or any other monetary unit. If there is an unsatisfied winning bidder (a bidder for which there are not enough goods to satisfy the bidder's quantity request), then the system allows the unsatisfied bidder to attempt to bid up the price to out bid the

other winning bidders, accept the number of goods available or decline to carry out

the purchase. If the unsatisfied bidder accept the available goods, then the winning

bid price described above will be the sale price. If the unsatisfied bidder declines

the available goods, the system offers the goods to the losing bidder who bid the

5   highest losing bid. Once the system finds the highest bidding losing bidder who is

willing to accept the goods available, a sale is made and this bidder pays the exact

same price as his or her proxy bid.

It is important to note that the block diagram above is merely illustrative of

one embodiment of a system for carrying out the invention disclosed and claimed

10   herein. Numerous variations are possible and are contemplated by the invention,

including various types of communications networks, various systems for bidders to

bid on goods, and various processing mechanisms for carrying out the functions of

the auction engine 410.

While specific embodiments of the invention have been described herein, it

15   will be apparent to those skilled in the art that various modifications may be made

without departing from the spirit and scope of the invention.

20

Claims:

1.   A method for conducting an on-line auction comprising:

receiving at least one proxy bid from at least one proxy bidder;

sorting the at least one proxy bid in a descending order;

5   determining at least one winner of the on-line auction; and

generating a winning sale price.

2.   The method according to claim 1, wherein the step of determining the

at least one winner further includes:

determining a total quantity of goods for sale; and

10   determining a quantity of goods requested by each of the at least one

proxy bidder;

allocating a portion of the total quantity of goods for sale to each of the

at least one proxy bidders based upon the quantity of goods requested by

each of the at least one proxy bidder until all of the total quantity of goods is

15   allocated, the total quantity of goods for sale being allocated to the at least

one proxy bidder in descending order.

3.   The method according to claim 2, wherein the step of generating the

winning sale price further includes:

determining which of the at least one proxy bidder was not allocated

20   any of the portion of the total quantity of goods;

determining a highest value bid by the at least one proxy bidder not

allocated any of the total quantity of the goods; and

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incrementing the highest value bid by the at least one proxy bidder

not allocated any of the total quantity of the goods by a predetermined

increment level.

4.   The method according to claim 1, wherein the step of generating the

5   winning sale price includes generating a winning proxy bid

5.   The method according to claim 3, wherein one of the at least one proxy

bidder declines the allocated goods.

6.   The method according to claim 4, further including:

allocating the portion of the total quantity of goods to a highest losing

10   bidder; and

generating a sale price for the highest losing bidder that is equivalent

to a proxy bid submitted by the highest losing bidder.

7.   The method according to claim 3, wherein the predetermined

increment level is a monetary unit.

15   8.   The method according to claim 3, wherein the predetermined

increment level is one dollar.

9.   A system for conducting an on-line auction, comprising:

a first module for receiving at least one proxy bid by at least one proxy

bidder;

20   a sorting engine for sorting the at least one proxy bid in a descending

order;

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a winning bid engine for determining at least one winner of the on-line auction; and

a winning price engine for generating a winning sale price.

10.   The system according to claim 9, wherein the winning bid engine determines the total quantity of goods for sale, determines a quantity of goods requested by each of the at least one proxy bidder and allocates a portion of the total quantity of goods for sale to each of the at least one proxy bidder based upon the quantity of goods requested by each of the at least one proxy bidder until all of the total quantity of goods is allocated, the total quantity of goods for sale being allocated to the at least one proxy bidder in descending order.

11.   The system according to claim 10, wherein the winning price engine determines which of the at least one proxy bidder was not allocated any of the total quantity of goods, determines a highest value bid by the at least one proxy bidder not allocated any of the total quantity of the goods, and increments the highest value bid by the at least one proxy bidder not allocated any of the total quantity of the goods by a predetermined increment level.

12.   A system for conducting an on-line auction, comprising:

means for receiving at least one proxy bid by at least one proxy bidder;

means for sorting the at least one proxy bid in a descending order;

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means for determining at least one winner of the on-line auction; and

means for generating a winning sale price.

13. The system for conducting an on-line auction according to claim 12, wherein the means for determining at least one winner of the on-line auction determines the total quantity of goods for sale, determines a quantity of goods requested by each of the at least one proxy bidder and allocates a portion of the total quantity of goods for sale to each of the at least one proxy bidder based upon the quantity of goods requested by each of the at least one proxy bidder until all of the total quantity of goods is allocated, the total quantity of goods for sale being allocated to the at least one proxy bidder in descending order.

14. The system for conducting an on-line auction according to claim 13, wherein the means for generating a winning sale price determines which of the at least one proxy bidders was not allocated any of the total quantity of goods, determines a highest value bid by the at least one proxy bidder not allocated any of the total quantity of the goods, and increments the highest value bid by the at least one proxy bidder not allocated any of the total quantity of the goods by a predetermined increment level.

15. A computer program product, comprising a computer readable medium having computer code embodied therein for conducting an on-line auction, comprising:

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computer readable program code devices configured as a first module

for receiving at least one proxy bid by at least one proxy bidder;

computer readable program code devices configured as sorting engine

for sorting the at least one proxy bid in descending order;

5   computer readable program code devices configured as a winning bid

engine for determining at least one winner of the on-line auction; and

computer readable program code devices configured as a winning price

engine for generating a winning sale price.

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ABSTRACT OF THE INVENTION

The invention provides a system and method for determining the winner or winners of an on-line auction accepting proxy bids. Proxy bids are bids that do not have a bid price, but instead have ceiling price that indicates the highest price a

5   bidder is willing to bid for goods. The system and method according to the invention are able to sort the bids from highest to lowest and determine a winner or winners depending on the amount of goods being offered for sale. The system then generates a winning bid price by determining the lowest bid required to win the auction. The winning bidder or bidders pay this winning bid price.

10

Fig.1

```
        ┌─────────────┐
        │    START    │   S102
        └──────┬──────┘
               │
               ▼
        ┌─────────────┐
        │  Receive    │   S104
        │  proxy      │
        │  bids       │
        └──────┬──────┘
               │
               ▼
        ┌─────────────┐
        │  Sort       │   S108
        │  proxy bids │
        │  in descending│
        │  order      │
        └──────┬──────┘
               │
               ▼
        ┌─────────────┐
        │  determine  │   S112
        │  winner or  │
        │  winners    │
        └──────┬──────┘
               │
               ▼
        ┌─────────────┐
        │  Determine  │   S116
        │  winning    │
        │  price/bid. │
        └──────┬──────┘
               │
               ▼
        ┌─────────────┐
        │    END      │   S120
        └─────────────┘
```

Fig. 2

Receive Bid — *S 205*

Sort all Bids Based on Proxy Limit — *S 210*

Determine Quantity of Goods Available — *S 215*

Assign Highest Proxy Limit as Active Bid — *S 220*

S 225 — Allocate items to Active Bid

Advance Active Bid to Next Highest Bid — *S 235*

S 230 — Are Items Remaining

N

Y

S 240 — Assign Price

Price = Next Highest Bid + Increment

Fig. 3

Start — S302

S304 — Receive Bid

S306 — Sort all Bids Based on Proxy Limit

S308 — Determine Quantity of Goods Available

S310 — Assign Highest Proxy Limit as Active Bid

S316 — Advance Active Bid to Next Highest Bid

S312 — Allocate items to Active Bid

S314 — Are Items Remaining

Y → (to S316)

N

S318 — Does Last Winner Receive Requested Number of Goods

N → (to S322)

Y

Price = Next Highest Bid + Increment

S320 — Assign Price

Assign Price for Winners (price of lowest buyer, not next) — S322

S324 — Does Last Winner Accept Partial Sale

Y → Allocate Remainder to Last Winner — S330

N

Allocate Remainder to Highest Accepting Loser — S326

Assign Price to Highest Accepting Loser — S328

S335 — End

Fig. 4

Sorting
engine   412

Winning
bidder
engine   414

Winning
Price
Engine   416

410

480

Network Device   420

Network Device   430

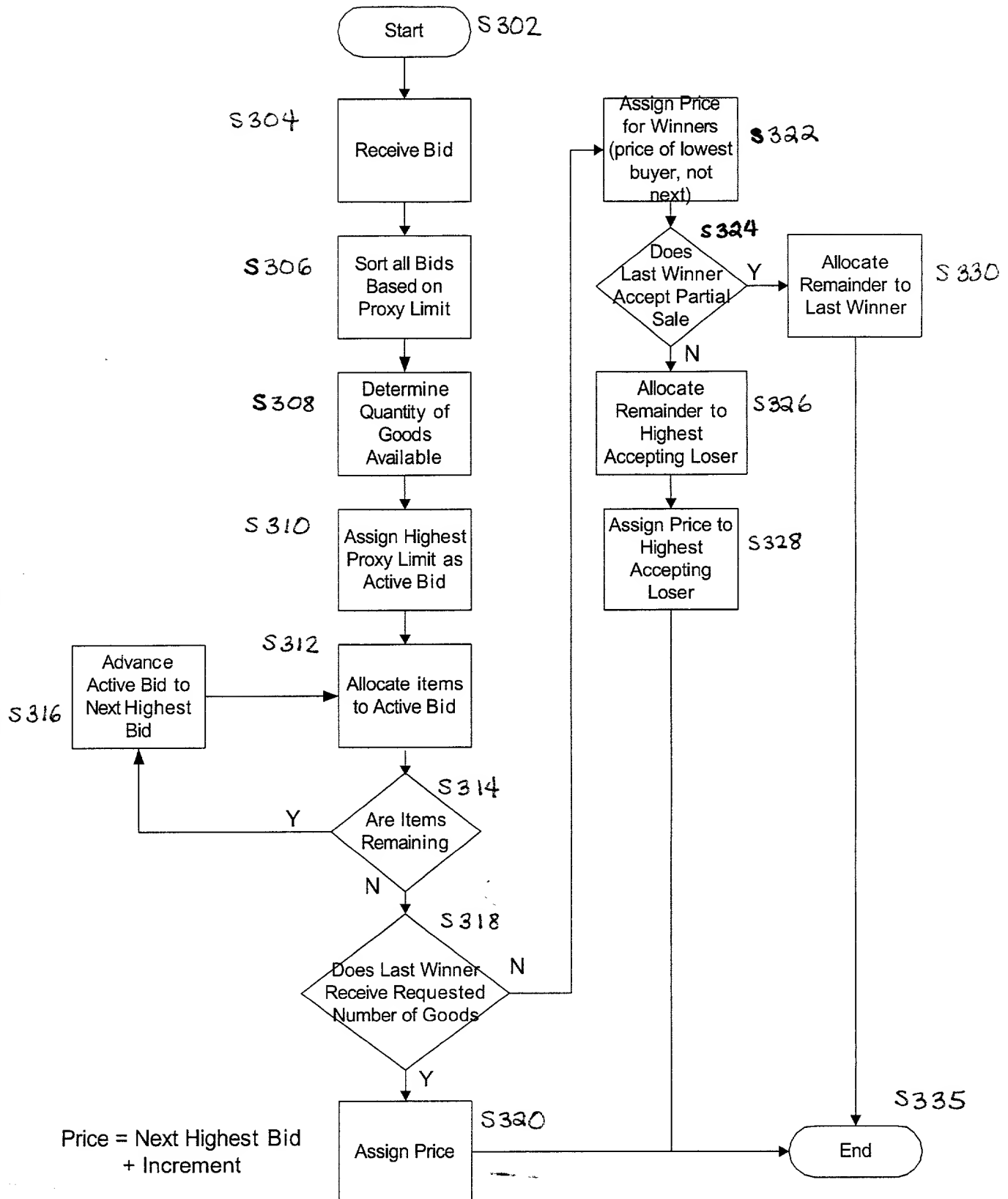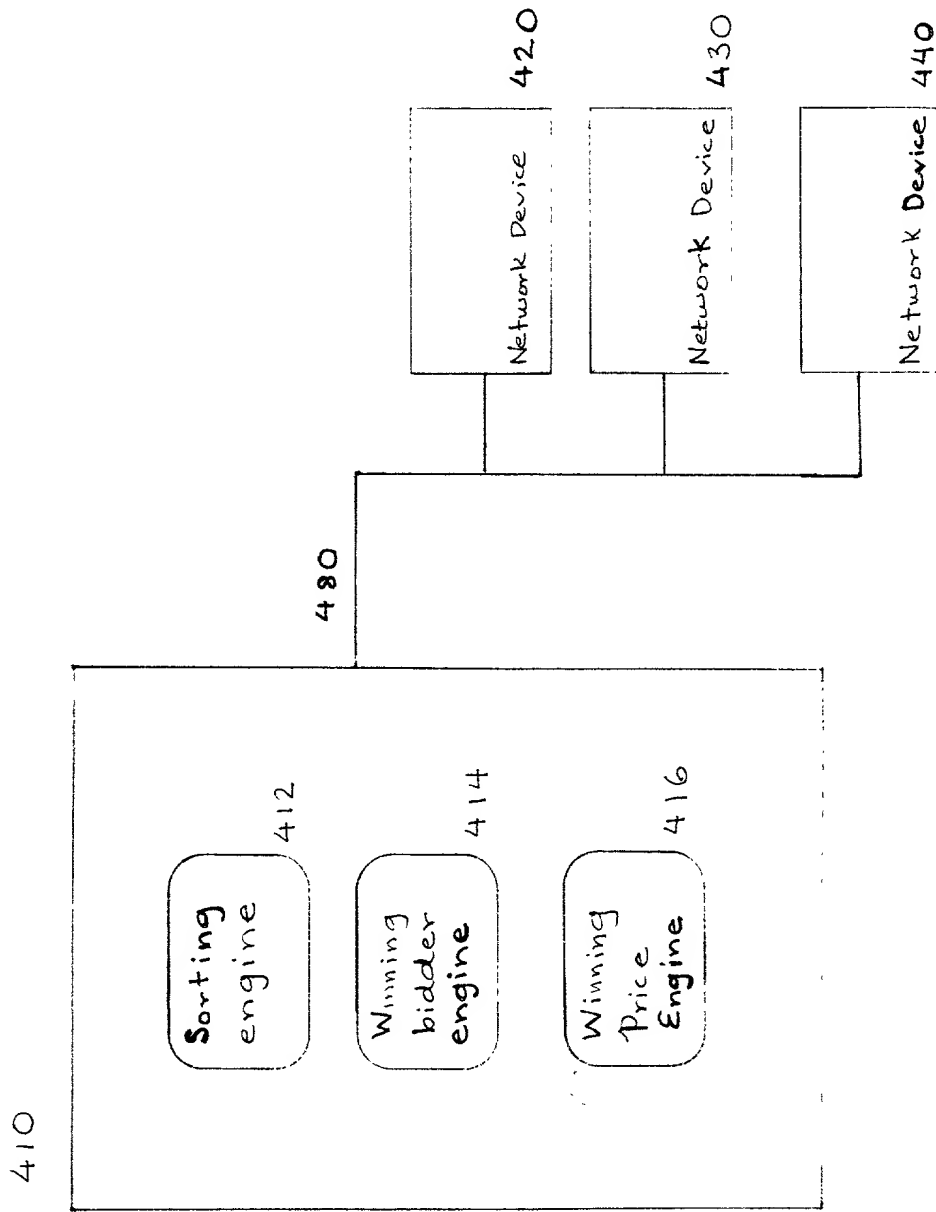Network Device   440

PATENT
Attorney Docket No. P5578NONPRO
Client/Matter No. 80168.00126

COMBINED DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

DECLARATION:

As below named inventors, we hereby declare that:

Our residence, post office address and citizenship are as stated below next to our names.

We believe we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled EFFICIENT IMPLEMENTATION OF AN AUCTION PROXY BID ENGINE, the specification of which is filed concurrently herewith.

The persons named as inventors in this application are Ying XIE; Elaine CHIEN; and Peter WILLIAMS.

We hereby state that we have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).
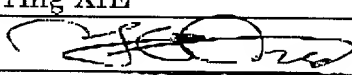
No prior foreign application for patent or inventor's certificate has been filed.
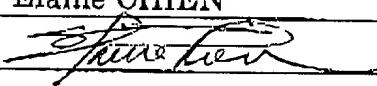
POWER OF ATTORNEY:

As named inventors, we hereby appoint Kenneth Olsen, Reg. No. 26,493, Timothy J. Crean, Reg. No. 37,116, Joseph T. FitzGerald, Reg. No. 33,881, Robert S. Hauser, Reg. No. 37,847, Alexander E. Silverman, Reg. No. 37,940, Christine S. Lam, Reg. No. 37,489, Anirma Rakshpal Gupta, Reg. No. 38,275, Sean P. Lewis, Reg. No. 42,798, Michael J. Schallop, Reg. No 44,319, Bernice B. Chen, Reg. No. 42,403, Kenta Suzue, Reg. No. 45,145, Noreen A. Krall, Reg. No. 39,734, Richard J. Lutton, Jr., Reg. No. 39,756, Monica D. Lee, Reg. No. 40,696, Marc D. Foodman, Reg. No. 34,110, and Naren Chaganti, Reg. No. 44,602, Elaine K.K. Lee, Reg. No. 41,936, all of Sun Microsystems, Inc., and William J. Kubida, Reg. No. 29,664; Matthew T. Bailey, Reg. No. 33,829; Stuart T. Langley, Reg. No. 33,940; Carol W. Burton, Reg. No. 35,465; Steven Kent Barton, Reg. No. 36,445; E. Michael Byorick, Reg. No. 34,131; Matthew G. Dyor, Reg. No. 45,278; Steven C. Petersen, Reg. No. 36,238; Sarah S. O'Rourke, Reg. No. 41,226; James

R. Laramie, Reg. No. 26,934; Stuart Lubitz, Reg. No. 20,680; Louis A. Mok, Reg. No. 22,585; John P. Scherlacher, Reg. No. 23,009; Alfred A. D'Andrea, Jr., Reg. No. 27,752; William H. Wright, Reg. No. 36,312; David Lubitz, Reg. No. 38,229; Wei-Ning Yang, Reg. No. 38,690; Ying Chen, under 37 C.F.R. § 10.9(b; J. Michael Thesz, Reg. No. 40, 354, Ajit J. Vaidya, Reg. No. 43,214, Kevin G. Shaw, Reg. 43,110; Naomi Abe Voegtli, Reg. No. 44,371; and Celine Crowson, Reg. No. 40,357, to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. Send all correspondence to: **Matthew T. Bailey, HOGAN & HARTSON L.L.P.,** Columbia Square, 555 13th Street, N.W., Washington, D.C. 20007-1109, and direct telephone calls to **Matthew T. Bailey,** telephone number 202/467-5467.
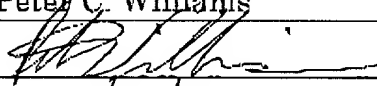
We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Inventor's Full Name:	Ying XIE
Inventor's Signature:	
Date:	11 / 15 / 2000
Residence: (City, State and/or country)	879 Salt Lake Drive San Jose, CA 95133
Citizenship:	P.R. China
Post Address Office:	Same as residence

Inventor's Full Name:	Elaine CHIEN
Inventor's Signature:	
Date:	11 / 15 / 00
Residence: (City, State and/or country)	4786 Cheeney Street Santa Clara, CA 95054

| Citizenship: | U.S.A. |
| Post Address Office: | Same as residence |

Inventor's Full Name:	Peter C. Williams
Inventor's Signature:	
Date:	11/15/00
Residence: (City, State and/or country)	107 Annie Lane Santa Cruz, CA 95062
Citizenship:	U.S.A.
Post Address Office:	Same as residence